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ABSTRACT

This study, completed in two stages, was undertaken to empirically determine whether home variables make a significant difference in the learning difficulties and school performance of children in an Indian setting. Participants in Phase I were 30 second-grade children between 6 and 9 years of age who were of normal intelligence and showed evidence of either having or not having learning difficulties in school. Data were collected on Bomanpatell's (1983) revision of Caldwell's (1968) HOME Inventory and Bomanpatell's (1983) Interview Schedule for Mothers, a measure for determining the extent of mothers' awareness of the importance of schooling and school activities, and perception of the extra help that children with difficulties need. Forty children (10 each from grades 1-4) participated in Phase II. Findings indicated that the stimulation pattern in the homes of children having learning difficulties can be distinguished from that in the homes of school children who are learning successfully. Differences between the two groups that were evident on HOME Inventory sub-scales concern: (1) language stimulation; (2) stimulation through toys, games, and reading materials; (3) variety of stimulations; (4) parental pride, affection, and warmth; and (5) stimulation of academic behavior. A common thread running through the findings was the fact that it is process variables (for example, what parents do in interacting with their children) that were important, not parental status variables involving individual characteristics. (RH)

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MOTHER - CHILD INTERACTION AND ITS EFFECT ON CHILD'S LEARNING

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Mother-Child Interaction And Its Effect on Child's Learning

SUMMARY

Dr. Prerana Mohite

Environmental influences have been conceptualized as modifiers of rate and pattern of development. Through empirical evidence variables such as low socio-economic class, material deprivation, institutionalizati have come to be associated with poor environment and are used as indicators to judge adequacy of stimulation and learning. But evenmore important than these status variables are the processes. The study has been based on this premise that the process variables in the home i.e. what parents do in interacting with their children is among other factors, an effective indicator of judging the nature of stimulating home environment. The study examined whether home variables make a difference in the classroom learning and learning difficulties of primary school children and if so which specific factors and process variables actually make the difference. The sample consisted of 100 children selected on the basis of the children's scores on (a) Draw-a-Man Test of IQ for Indian children, (b) Graded Word Test, (c) Teacher's Rating Scale, besides their academic records and feasibility for home observations. The children were fromgrades 1 to IV, 50 with learning difficulties, 50 without learning difficulties. The revised version of Caldwells Home Observation for Measurement of the Environment (HOME), a scale that measures characteristics of environment, was used to assess the homes during the three to five visits made to each home. Mothers were then informally interviewed using the interview schedule. Findings show that the differences in the means of the two groups of children on the HOME

scores was statistically significant ($p < .01$). On five out of the eight sub-scales, namely, Language Stimulation; Stimulation through Toys, Games and Reading Materials, Variety of Stimulation; Pride, Affection, Warmth ($p < .01$); and stimulation of Academic Behavior ($P < .05$) the differences between the two groups were statistically significant. A relationship exists between HOME scores and various academic measures as indicated by their correlation. Mothers responses on the schedule are also discussed. Findings imply that Mother-child interaction makes a significant difference in a child's classroom learning, a point which should serve as a ground work for parent education programmes.

MOTHER - CHILD INTERACTION AND ITS EFFECT ON CHILD'S LEARNING

Most theories of development recognize the pervasiveness of environmental influences on shaping childs' behaviour. However, there is no common agreement about the term "environment", what it encompasses and what are the modes of its influences. The term has been used to include/refer to wide range of phenomena, from space available for a child to play to the cultural milieu. Environmental influences have been conceptualized as modifiers of rate and pattern of development.

The early focus of the research was on adverse effects of staying in "impoverished" environment. By now it is a fairly well established fact that depriving prolonged events in young age have adverse effect on children's intellectual development and learning. Different studies in past focused on specific aspects of environment. Through empirical evidence certain variables such as low socio-economic class, maternal deprivation, institutionalization came to be associated with the poor environment or lack of stimulating environment. Not only that, they began to be used as indicators to judge adequacy of stimulation and learning.

While such studies do demonstrate some overall effects of the home environment on school learning, they are not very

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helpful to the school or the parents as they fail to give any specific clues about what can the schools or the parents do to improve the learning of some particular children.

In the last two and a half decades the focus of research has shifted from status variables in the environment to the process variables. (Bloom, 1964; Caldwell & Bradley, 1978; Marjoribanks, 1979). Greater attention is being paid to the analysis of the home environment variables in relation to cognitive development. The environment must be essentially screened for parameters most crucially affecting children's school learning. In this regards Dave (1963) and Wolf (1966) took a somewhat different approach to the study of the effects of the home environment. Their basic premise was that it is what parents do rather than their status that accounts for the learning and development of their children. On the basis of the literature Dave hypothesized that the home environment relevant to educational achievement may be studied in terms of the process variables such as, work habits of the family, academic guidance and support, stimulation in the home, language development and academic aspirations and expectations. These variables were broken down into more specific process characteristics and the homes were observed. Findings indicated a high correlation between the overall index of the home environment and the results of a battery of school achievement tests.

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It is increasingly being recognized that the index of home environment is more effective predictors of school achievement than the intelligence or aptitude tests.

In India an extensive study conducted by National Council of Educational Research and Training (1978) give evidence that ultimately the home variables and child's intelligence account for differences in school achievement. Keeping IQ and SES constant, the single most important variable which tilted the balance in favour of school achievement was facilities for language at home.

The home environment and its effect on learning is an important issue from a research point of view. In India, it is of equal importance from a national perspective as well. Universalization of primary education has been the national goal and priority. Even after increased rate of enrolment children's failure to learn result in high rate of wastage and stagnation. Among various measures of inputs in school the inputs at home are equally, if not more important. When the school offers a relevant program and when the home environment backs up the learning process, a child will learn to his fullest ability. In order to channelize the resources at home, a search for the process variables, the specific factors in home that would make a difference in the child's classroom learning would be a prerequisite. Once the specific

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difficulties are identified the inputs can be more directed rather than generic.

With this rationale the present study was undertaken to findout empirically whether home variables significantly make a difference in the learning difficulties and school performance of children in an Indian setting.

The study is described in the following pages.

Objectives :

Broad : To study mother-child interaction and its effect on the classroom learning of children.

Specific : To study and find out the differences in the home environment of children who face learning difficulties and of other children who do not face learning difficulties.

To find out a relationship, if any, between specific home variables and learning difficulties.

Method

Research Design: The study was completed in two phases. In the first phase, the causal-comparative strategy of descriptive research was used for the study. In this nonexperimental investigation, the investigator proceeded on an assumption that X (home variables) are related to and presumably determine Y (class-room learning), to a certain extent. Observations were

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made in the naturalistic setting to meet the objectives of the study. In accordance with this method direct observations were used as a scientific practice that included observing and associated recording and analysis of naturally occuring things and events.

Phase I

Sample Selection and Description

The sample for Phase I of the study was selected from one of the Municipal Corporation Schools of the city of Baroda Children of Grade II were selected mainly on the rationale that Grade I is usally an adjustment period for children to a Primary School setting. By grade II, the formal learning pattern gets clearly established and hence more accurately identified.

Following procedure was followed for the sample selection which mainly required identifying children who faced learning difficulties and those who did not face learning difficulties. The sample was selected on the basis of three *test measures namely: (1) Draw-a-Man Test of IQ(Phatak, 1966): (2) Graded Word Test (GWT written, Mohite, 1983): (3) Teacher's Rating Scale (TRS, Mohite, 1983).

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*Described in detail under the Section on "Tools and Tests".

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Step 1 : All the children of grade II in the school were administered the Draw-a-Man Test of IQ to ascertain the normalcy of their IQs. Those with IQs below 90 were excluded from the sample.

Step 2 : A Teacher's Rating Scale (TRS) was given to the class teachers to be filled for each child individually. Responses on the TRS were categorized according to the prescribed procedure. The child's level of performance depended on the category within which he was. The categories are :

0	- 27	:	below average, had difficulty
28	- 67	:	average performance
68	- 82	:	above average performance, no difficulty.

Step 3 : A Graded Word Test (GWT-written) for II grade was administered to all the children. Those scoring 19 or above were considered as not having any learning difficulties.

Step 4 : After scrutinizing the annual examination results of the children in their grade I exam, those scoring 'A' or 'B' grade were classified as academically good performers, facing no learning difficulties and those scoring 'C', 'D' or 'E' as academically poor performers, facing learning difficulties.

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The child was identified as facing learning difficulties or other wise if his/her scores were adequate on at least three out of the four aforementioned measures.

Finally 30 children were selected as follows :

AGE - 6 to 9 years 30 Children (LSES)

Group A (n_1 = 14) Without learning difficulties — 7 Boys, 7 Girls

Group B (n_2 = 16) With learning difficulties — 8 Boys, 8 Girls

Table 1 presents the sample distribution on the basis of their socioeconomic status.

Table 1

Distribution of Phase I Sample

Group \ SES	High	Middle	Low
A (n_1 = 14)	1	10	3
B (n_2 = 16)	0	8	8

Table 2 describes the background characteristics of the sample.

Table 2

Sample Description : Background Characteristics

FAMILY TYPE		NUMBER OF FAMILY MEMBERS			RELIGION		
Nuclear	Joint	4 and below	5to8	9 and above	Hindu	Islam	Others(Sikh, Christian)
25	5	9	17	4	24	2	4

FATHER'S AGE					MOTHER'S AGE				FATHER'S OCCUPATION						
25 to 30	31 to 35	36 to 40	40 to 45	Above 45	25 to 30	31 to 35	36 to 40	41 to 45	Unemployed	Unskilled worker	Semi-skilled worker	Skilled worker	Clerical	Semi-professional	Professional
11	8	5	4	2	16	9	3	2	2	3	2	21	1	1	-

MOTHER'S OCCUPATION		FATHER'S EDUCATION					MOTHER'SEDUCATION				
Working	Non-working	No. Edu.	I to IV	V to VII	VIII to S.S.C.	Above S.S.C.	No Edu.	I to IV	Vto VII	VIII to S.S.C.	Above S.S.C.
16	16	3	2	7	13	5	8	6	7	8	1

LANGUAGE SPOKEN			
GUJARATI	MARATHI	HINDI	BILINGUAL
16	3	2	9

Description of Tools and Tests

The tools used are classified into two categories : (a) Tools used for sample selection, and (b) Tools used for data collection.

a) Tools used for Sample selection:

i) Draw-a-Man Test of IQ for Indian Children (DAM)

The Draw-a-Man Test has been adapted by Phatak (1966) for the Indian population from Good enough's Draw-a-Man Test (1926). The age norms are calculated in the form of average standard scores as deviation. IQs and percentile ranks for ages 6 to 10 years from five environmental levels.

ii) Graded Word Test (GWT Written)

A Graded Word Test on similar lines as Schonell's Graded Wordlist, prepared by Mohite (1983) was used. The test consists of 40 words each for standards, I, II and III. The words are according to the levels of complexity of the "Barakhadi". (and are taken from the readers prescribed for the given standards.) The word list begins with simple two letter words and proceeds to include a set of words more complex than the previous.

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iii) Teachers' Rating Scale (TRS)

The scale developed by Mohite (1983) and standardized by Shastri and Ramanathan (1984) aims to find out whether children have difficulties in learning to read and write. There are 41 items distributed under six major areas. All items are behaviourally stated and the teachers are supposed to rate a child depending on their day-to-day classroom observations.

b) Tools used for data collection :

i) Caldwell's HOME Inventory (Revised)

The scale is originally known as the Home observations for the Measurement of the Environment (HOME), a revision of the preschool scale designed by Caldwell (1968). It has eight subscales which measure, Stimulation through toys, games, and reading materials; Language stimulation; Physical environment; Safe clean, and conducive to development; Pride affection, and warmth; Modelling and encouragement of social maturity; stimulation of academic behavior; Variety of Stimulation; and Physical punishments. This scale has been further modified by Bomanpatell (1983),to suit the Indian setting. After further modifications this scale has been used for the study conducted in Phase I.

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ii) Interview Schedule for Mothers

The schedule has been prepared by Bomampatell (1983) to find out, the extent of awareness of mothers regarding the importance of schooling, their degree of awareness regarding school activities, and to discover any needs as perceived by the mothers regarding extra help that children with difficulties need.

Procedure for Data Collection

Pilot testing. As per the ideal size for pilot testing, one-tenth of the actual sample i.e. 3 children were selected from standard III of the same school. Home visits were made at different times of the day to identify blocks of time for observations when interaction between mother and child are possible. Hence it was decided that each home would be visited five times for a period of 20 minutes each during early morning, late morning, lunch, after school, and evening. Inter-observer reliability was established at 0.87 by two researchers in two homes.

Procedure. Rapport was built and informality was stressed to increase the probability of realistic responses. If the item was observed in the homes for atleast three times only then did the family receive a credit with providing the type of input required by the item. If the item is observed twice or less,

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means a 'no', indicating no credit. After completion of the five observations, the mothers were informally interviewed.

Analysis

Small sample t-test was used to find out the significant mean difference between scores of children with and without learning difficulties on the Home Inventory. t-test was applied to see the differences if any between the two groups on all the eight subscales of the Inventory. Responses of mothers on the interview schedule were scrutinized in terms of differences in the kinds of responses of mothers of children with and without learning difficulties. Karl Pearson's coefficient of correlation was computed between Home Inventory and some academic measures.

Results

1. There was a significant difference in the overall mean HOME scores of children with and without learning difficulties (t-test was significant at .01 level).

2. Five out of the eight dimensions of HOME revealed a significant difference in the stimulation input patterns in the homes of children with and without learning difficulties. The dimensions, in order of importance are namely: Language stimulation (significant at .01 level); Stimulation

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through toys; games, and reading materials (Significant at .01 level), variety of stimulations (significant at .01 level); pride affection, warmth (significant at .01 level); and stimulation of academic behaviour (significant .01 level).

3. Moderate positive to high positive correlations were obtained between overall HOME scores and various academic measures like Teacher's Rating Scale (.56), Graded Word Test (.65) and Children's school test scores (.98).

4. Too many differences were not found in the response of mothers of children with and without learning difficulties. All mothers seemed concerned about the need for sending their children to school and seemed to view education as a ladder to social mobility. The major difference, however, was that more mothers of children without learning difficulties were aware of the subjects in the school and the way they were taught.

5. Three dimensions : Physical environment - safe, clean and conducive to development; modelling and encouragement of social maturity;and physical punishments did not seem to discriminate between the homes of children with and without learning difficulties.

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Thus overall it can be concluded that, on the whole, input of stimulation in the homes of children without learning difficulties was better than that of children with learning difficulties.

Phase II

The main objectives of the study were met through Phase I. It was indicated that the stimulation pattern in the homes of children having learning difficulties is distinguishable from that in the homes of children who were learning successfully in school, in the five dimensions described earlier. At this juncture the investigator felt the necessity of reconfirming or testing out the validity of these conclusions. Hence it was decided to undertake phase II of the study.

The procedure of sample selection, tools used and methods of data collection used in phase II were more or less the same. The main modification was that the major tool of data collection i.e. Home Inventory was by now already standardized and hence was used in place of Caldwell's HOME inventory. Secondly, the research design was mainly by way of spot surveys in four different communities of Baroda. Phase II is presented focusing upon the relevant procedure and results, rest of the details being the same as in Phase II.

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Procedure

Three lower socio-economic communities of Baroda were selected. Children with and without learning difficulties were selected on the basis of teachers' ratings and their performance on Graded Word Test. These children were than observed at their homes on the Home Inventory.

Sample description

The sample is described in two groups. Sample of community I and community II is presented together and that of community III is presented seperately.

Table 3

Sample description of Community I and II

Grades / Groups	I		II		III		IV		Total
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
With difficulty	4	3	1	2	6	2	4	3	25
Without difficulty	2	3	2	2	2	3	4	4	22

Children were selected from Grade I, II, III, and IV. From community I and II 25 children with difficulty and 22 without difficulty were identified.

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The sample of community III consisted of 40 children from lower socio-economic class 10 each belonged to I, II, III, and IV grades. These children were scored on the standardized Home Inventory. Ten top scores i.e. children without difficulty and 10 bottom scores i.e. children with difficulty were selected. All children belonged to lower SES.

Analysis

Analysis for both sample groups was done in terms of :

1. Mean difference in total home scores of high and low scores i.e. children with and without learning difficulties.

2. Mean difference in each sub-component of the Home Inventory namely, Language stimulation, Physical environment, Encouragement of social maturity, Variety of stimulation and Maternal attitude and disciplining.

t-test was computed for the above.

For the sample of community I and II the home scores were also correlated with the Graded Word Test scores to see the degree of relationship between home and academic performance.

Results

1. The correlation between Home Inventory scores and Graded Word Test scores of sample of community I and II indicated high positive correlation, thus establishing and reiterating the relationship between Home variables and academic performance.

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Table 4

Correlation Between Home Inventory (HI) Scores and Graded Word Test (GWT) scores of Community I and II Children

		Mean	S.D.	Sample n	Correlation
Community I	HI	59.48	17.39	18	.62
	GWT	28.90	27.06	18	
Community II	HI	65.22	20.65	29	.63
	GWT	30.88	23.95	29	

2. There is a significant difference between the Home scores of children with and without learning difficulties of community I and II. It indicates that the stimulation inputs in the homes of children without difficulty are more as compared to inputs in the homes of children with difficulty.

Table 5

Significance of the Difference in the Means of Two SES Groups (Community I and II) on the Home Inventory

	MS (H) without Difficulty	MS (L) with Difficulty	S.D. $\bar{X}$	Cal. t.
Home Inventory Score (Overall)	17.9	11.6	0.84	7.5*

$n = 67$, $n_1 = 32$, $n_2 = 35$, df = 65, table t = 2.66* *p $<$ 0.01.

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3. Table 6 indicates that the mean Home scores of children with and without learning difficulties indicated a significant difference in the subscales of Language stimulation, Maternal attitude and Disciplining, Variety of stimulation and Encouragement of Social Maturity in that order of importance.

Table 6

Significance of The Difference in The Means of The Two Groups (Community I & II) on Specific Subscales of The Home Inventory

Subscales	MS (H) without Difficulty	MS (L) with Difficulty	SD X	t
1. Language Stimulation	5.37	3.08	0.36	6.36*
2. Physical Environment	1.28	0.94	0.25	1.36
3. Encouragement of Social Maturity	1.65	1.34	0.11	2.81*
4. Variety of Stimulation	4.00	2.62	0.38	3.63*
5. Maternal Attitude and Disciplining	3.93	2.65	0.24	5.33*

$n = 67$, $n_1 = 32$, $n_2 = 35$, $df = 65$, table $t = 2.66$*

*$p < .01$

4. In the community III the difference in mean scores of children with and without difficulty was significant at .05 level as seen in Table 7.

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Table 7

Home Scores of Community III Children

	MS (H) Without difficulty	MS(L) with difficulty	SD X	t
Home Inventory Scores (Overall)	18.8	8.1	.64	16.71*

$n = 20$, $n_1 = 10$, $n_2 = 10$, $df = 18$, table $t = *2.10$,

*p $<$ .05, two tailed.

5. For the community III sample, mean difference was significant in the subcomponent of Language stimulation, Physical environment, Encouragement of Social Maturity, Variety of stimulation, and Maternal attitude and disciplining. All were significant at .05 level (two tailed).

The findings of Phase I and Phase II can be summarized as follows :

1. Academic performance and home variables are related as indicated by correlation between Home Inventory Scores and Graded Word Test Scores.

2. The mean difference between Home scores of children with without learning difficulties is significant suggesting that levels of stimulation inputs in the homes of the two groups are different

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3. The difference in the mean scores on the subscales of Language stimulation, Maternal attitude and disciplining, Encouragement of social maturity and Variety of stimulation are significant.

Conclusion

In closing, it appears that certain process related variables as assessed by the HOME Inventory seem to make a difference in the homes of children with and without learning difficulties w ich accounts for the overall differences in mean scores of the homes of the two groups of children. A common thread running through the findings was the fact that it is what parents do in interacting with their children that matters, than what they are (Status Characteristics).

Discussion : The results so far have shown clear differences in the homes of children with and without learning difficulties. They answer the major questions addressed in the study and fulfill both the broad and specific objectives. Within the framework of the study, an interesting pattern of discussion emerges.

Logical considerations indicate that environmental status variables such as parental education and IQ cannot directly influence child's behaviour. Status variables must be mediated by process variables (Walberg and Marjoribanks, 1976). The pathway of effect is likely to be mother status characteristics

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leading to mother-child process characteristics which lead to child achievement.

In the present study five dimensions of the home environment have been found to differ significantly, in terms of input of stimulation, in the homes of the two groups of children. Each subscale is subject to interesting interpretations. Some emphasis is given to the process characteristics in each of these subscales.

Language Stimulation

Review suggests (Bloom, 1981; BVL report, 1979) and as was expected, language stimulation showed the strongest relationship to learning difficulties. Much of the learning in the school or outside of it is based on the use of language. The home is where the child learns much of his "mother tongue" and it is the one place where he may have the greatest opportunity to enlarge and enrich his language. The learning of language and its use in the home include the following : Family concern and help for correct and effective language usage. e.g. it was observed by the investigator in the home of a group, A child, when she said "Hospital", her mother immediately pointed out the correct word. While use of incorrect words or faulty grammer by children in group B homes generally went unnoticed by the mothers.

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There was very little complex use of language in group B homes. In bilingual homes neither language spoken was grammatically correct. Typically in most homes of group B children, the mother did not talk to the children while she was cooking meals, doing the dishes, cleaning the house, bathing the child, and doing all the other activities that she is involved in at home. The important thing is to have the children be a part of the action around them, which means that they must be involved and that language appropriate to various activities be provided. By not talking to children, the mother/parent is depriving them of this stimulation. This indicates that the process characteristics are important for the child's language development.

In a study by Broman (1977), it was found that low achievers as a whole differed in several areas of development from their academically successful controls but the largest and most consistent differences of etiological significance were in aspects of family environment closely associated with opportunities for verbal-conceptual stimulation. These findings offer support for a verbal-deficit theory of learning disorders, and the correlative concept of maximum transfer approach to diagnosis and remediation which focuses the procedures directly on the skill to be learned (Vellutino, 1977).

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Stimulation through toys, games and reading materials.

The next in importance with regards to significance of difference in input of Stimulation patterns of the two groups of children is the subscale - stimulation through Toys, Games and Reading materials. It seems that making available developmentally stimulating materials and experiences is associated with children's mental and achievement test performance. The strong relation between provision of appropriate play materials and children's cognitive development may result from several factors. Firstly, they are a source of concrete experiences. A second explanation might be that toys (as well as being a source of learning per se) serve as a vehicle to facilitate learning from parents when parents play and instruct their children while using toys. This would include the opportunity to hear parents talk and to learn some problem solving skills from them regarding the toys' use. Bernstein has suggested that the significance of a toy depends more on the mothers interpretation of the toy to the child than on any intrinsic property of the toy (Bernstain and Young, 1967). The mother's interpretation is, he suggests, a reflection of the general guidance and control procedures that she employs in her dealings with the child. He thus sees the toys and the communication indexes as reflecting this general orientation on the part of the mother.

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In the present study, while toys were visible in most homes, in certain homes of group B children, they were hardly ever utilized. This supports Bernstein's proposition that the significance of a toy depends more on the mother's interpretation of the toy to the child, than on any intrinsic property of the toy. While resources (Toys, Reading Materials etc.) have a definite place in a child's environment, whether these will become a source of stimulation for a child will largely depend on the use of these resources by the parents in interacting with child. This suggests that the process of interaction is more important. There is at least some evidence to suggest that the relation between learning materials and cognitive development is not solely a function of the SES variables (Bradley and Caldwell, 1982; Moore, 1968). Based on the correlations done in this study, it appears that the availability of the toys may be especially significant during the early years. Its strong relation to later achievement seems to be at least partially mediated through its relation with early intellectual functioning. It may be that it is through its impact on early cognitive abilities that the long-term relationship with academic achievement is attained. The Wulbert et al. (1975) study revealed that the amount and appropriateness of toys during the preschool years significantly differentiated homes of language delayed and normal children.

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Toys and material score on the HOME inventory have interesting results in terms of stimulation input patterns in the homes of the groups of children, and thus suggests a relationship with academic achievement.

Variety of Stimulation

The subscales 'Variety of Stimulation' also has an equal degree of importance in terms of difference in significance of the input patterns in both the groups of children.

In the present study, the subscale variety of stimulation has three items, namely (i) Child is taken out atleast once a month. (ii) Child has been for an outing to zoo/garden within last three months. (iii) Child has company of agemates in the neighbourhood.

Having material resources is not enough. Parents have to verbally stimulate children which will enable them to actively recall, hence perhaps remember educational information got from various sources. What is important is a meaningful interpretation of the experiences unfolding upon the child, rather than merely undergoing them.

Pride, Affection, and Warmth

The next dimension of importance is the subscale Pride, Affection, Warmth. School learning is a long and difficult

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process for most children. Unless there is a great deal of support and encouragement, children will find it difficult to maintain their interest in and committment to the learning. Almost every child encounters some very difficult problems in particular aspects of the learning or in some of the learning tasks. Unless there is someone to help the child over these special difficulties, he may despair of his ability to learn. It is typically in the home that children get the encouragement they need and it is usually someone in the home that helps children over very difficult learning problems when they are encountered.

In the present study, the investigator observed that reinforcement is directed more towards inhibiting behaviour than it is toward encouraging exploratory activities. It must be however, kept in mind, that the mother did not always use a harsh or derogatory tone to imply the same. Again, this is the picture of the mother's need to cope with the behaviour rather than to shape it. In other words she is more concerned with a child's not being troublesome than she is with his learning more about his world.

However, the investigator strongly feels that this is one area which needs to be looked into seriously by mother education programme developers and implementors. Total positive reinforcement could be forthcoming in many forms

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for which mothers can be trained without needing too many resources. This is one dimension of the home where children generally seem to be missing out input.

Stimulation of Academic Behaviour

The fifth dimension in the home environment, which showed a significant difference in the means of the two group is - stimulation of Academic Behaviour.

The home is usally the place in which the childx secures the motivation to learn well and to aspire to an education and life-style which will serve him or her well in the future. Typically, it is the parents who support and encourage each child at the different stages in his educational development.

In terms of parental standards and expectations for the child's school work - the investigator found that except 4-5 mothers (Group A), parents generally never set any standards for the child's learning in and out of school. Most children were first generation learners, in that even if the mother had attended school, it had made no difference to her, so they felt in general that as long as their children did better than them at studying or even attempted going to school, they were satisfied. They generally said, "They should do well in school and should not fail". They did not have any expectations regarding

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quality of work of grades the child should seek to secure.

Out of the eight dimensions of the HOME Inventory, the five just discussed seem to have maximum process characteristics and differ significantly in homes of children with and without learning difficulties.

In the final analysis, for the present study, the focus is on stimulation inputs given in the home. Logically one may derive from the above discussion, that a condition (opposite to that of deprivation) where there is no "loss" or "lack" of stimulation for adequate development and where there is enough stimulation input in experiences and conditions of learning, may be considered as "adequate stimulation". When interpreted thus, for purposes of the present study, the following may be considered the experimental inppts given by the family, namely, materialistic inputs (toys, games, reading materials); language stimulation; social and emotional inputs (pride, affection, warmth, encouragement of social maturity) etc.

The responses of the two groups of mothers were too varied to be compared. However, clear differences in the response of the two groups of mothers can be seen in terms of awareness of subjects taught in school and awareness of existence of learning difficulty in the child. They were willing to do 'something' for their children. There was no criteria for judging the

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rightness or wrongness of the responses. Most responses were even consistent with what was observed, except in one or two negligible cases.

These families on the whole have a deep concern for their children. And the parents even have a deep underlying reservoir or potential for improving their children's lives, although it sometimes becomes difficult to tap. These two facts should motivate programme planners to seek parents' help in becoming partners in their children's education. It must be emphasized to the mothers that teaching their children should also be considered a natural part of child rearing and a universal part of ones relationships with each other, such as when one gives information, help solve common problems, share experiences or observe others struggling with them. In this context, Lambie et. al., (1974) felt that mothers would accept teaching as less dependent on those with official authority to teach and more dependent on the interactions between individuals, making it easier for them to consider themselves as one of the child's teachers in a natural sense.

Methodological Implications

The study has implications for action research. It helps begin to fill an empirical research void in our setting, in its quest to find out a relationship between process related,

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home variables and learning difficulties. It gives deeper insight regarding parameters/dimensions in the home environment of primary school children and their relation to learning difficulties. This would have valuable implications for parent education programme planners. In short there are no panaceas, but by focusing ones measurement around well-defined parameters (ultimately leading to intervention strategies), one can begin to approach the issue of family and environment processes as a casual factor in children's academic achievement.

To conclude one must consider the views of Leichter and her associates, where the complexity of the family as an educational frame-work is amply illustrated in a special issue of the Teachers College Record (Leichter, 1978). In discussing education within the nuclear family Leichter emphasized the variety of perspectives one may take : the education of children by parents; the education of parents by children; the education of siblings by siblings; and the education of parents by parents. She also noted the importance of considering the combined influences of family and external sources such as neighbourhood friends, classmates, teachers, work associates, and of course, relatives.

One can take off from these view-points to new vistas of research and derive the much-needed implications for developing programmes and methods for fostering a rich and stimulating home environment, to facilitate children's academic learning.

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CITED REFERENCES

Bernard Van Leer (BV L) Foundation.(1979). Parent and community involvement in early childhood education (Third Western Hemisphere Seminar). Colombia : The Hague.

Bernstein, B., & Young, L. Cited in Jones, P.A. (1972). Home environment and the development of verbal ability. Child Development, 43, 1081-1086.

Bloom, B.S. (1964). Stability and change in human characteristics. New York : John Wiley.

Bradeley, R.H., & Caldwell, B.M. (1981). Paediatric usefulness of home assessment, Advances in Behavioral Pediatrics, 2, 61-80.

Bradeley, R.H., & Caldwell, B.M. (1984). The HOME inventory and family demographics. Developmental Psychology, 20, 315-320.

Broman, S.H. (1977, March). Early development and family characteristics of low achievers. Paper presented at the 14th international conference of the Association of Children with Learning Disabilities, Washington, D.C.

Dave, R. Cited in Bloom, B.S. (1981). All our Children Learning New York : McGraw Hill.

Iyer, U. (1981). On the threshold of learning : The mother and Child at home. Unpublished master's thesis, M.S. Uni. of Baroda.

...32...

Lambie, D.Z., Bondi,J.T., & Weikart, D.P. (1974). Home teaching with mothers and infants. Michigan : High/Scope Educational Research Foundation.

Leichter, H.J. Cited in Davis, D.J. (1981). Evaluating the family as an educational framework. In A. Lewy & D. Neuo (Eds.), Evaluation roles in education (pp. 433-455), London: Gordon and Breach.

Marjoribanks, K. Cited in Davis, D.J. (1981). Evaluating the family as an educational framework. In A. Lewy & D. Neuo (Eds.), Evaluation roles in education (pp. 433-455), London : Gordon and Breach.

Moore, T.. Cited in Bradley, R.H., & Caldwell, B.M. (1984). The relation to infant's home environments to achievement test performance in first grade : A follow-up study. Child Development. 55, 803-809.

National Council of Educational Research and Training. NCERT (1978). A study of children between the ages 5½ to 11 - Effects of environmental process variables on school achievement and cognitive development. (Report of the core study). New Delhi.

Vellutino, Cited in Broman, S.H. (1977, March). Early development and family characteristics of low achievers. Paper presented at the 14th International Conference of the Association of Children with Learning Disabilities, Washington, D.C.

...33...

Wolf, R, Cited in Bloom, B.S. (1981). All our children Learning. New York ; McGraw Hill.

Wulbert, M., Inglis, S., Kriegamann, E., & Mills, B. (1975). Language delay and associated mother-child interaction. Developmental Psychology, 11, 61-75.

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